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IMAP Statement on contraception for adolescents/young people in the era of HIV and AIDS

The statement below was revised by IPPF's International Medical Advisory Panel (IMAP) in October 2005.

Introduction

More than 1.2 billion of the world's population are adolescents/ young people – defined in IPPF policy as persons between the ages of 10 and 24 years – and the number of people in this category has never been higher. Although the circumstances and behaviour of adolescents/ young people are very diverse, this is generally the time of life when sexual relations are experienced for the first time and when patterns of behaviour become established. Therefore the sexual and reproductive health requirements of this group represent a vital aspect of the work of IPPF's Member Associations and are at the core of the Federation's strategic framework. This Statement henceforth abbreviates adolescents/young people to "young people".

Young people are a group in which unsafe sexual practices carry special hazards. For example, with pregnancy in the under-18s, whether intended or not, both the morbidity and the mortality exceed those for older women, and the child too is at excess risk. Moreover, early parenthood tends to curtail opportunities for education and employment, hampering social and cultural development. Where a young woman chooses termination, she is more likely than an older woman to have a procedure that is unsafe because performed late or clandestinely; one reason is lack of information, another is lack of access to appropriate services. Other unwanted consequences of sexual activity for both sexes are the risk of sexually transmitted infections (STIs), including HIV/AIDS, and the psychological and health consequences of sexual violence.

Youth-friendly services

A youth-friendly service flexibly meets the needs of young clients and retains them for continuing care by offering a wide range of relevant sexual and reproductive health (SRH) services. The most needed services are identified and, when possible, provided at the same clinic – for example, contraceptive counselling and provision (including emergency contraception); STI/HIV counselling, prevention, diagnosis and treatment; prenatal and postpartum care; sexual abuse counselling; relationship counselling; abortion services (where legal); and post-abortion care. The reasons why young people may hesitate to seek help include inconvenient hours, unfriendly service, legal and policy hurdles, concerns about confidentiality, fear of discrimination (in particular among sexually active girls), being treated with disrespect, unfamiliarity with using services, and high costs. Service providers need to be aware of these special difficulties and to address them by offering a supportive and nurturing environment, which may include roles for parents, partners, friends, teachers, religious leaders, and any others identified as relevant by the young clientele.

Whether the services are offered in a clinical setting, in a youth-oriented site, in a school, or in the community, certain characteristics typify youth-friendliness:

- The providers have received special training in how to deal competently and sensitively with the various SRH needs of young people, male and female
- Every effort is made to ensure that young clients are treated with respect
- Providers are non-judgmental and the interviews are private and confidential
- The working hours of the service have been chosen to provide maximum access for young people, with account taken of factors such as school attendance, marital status, sexual orientation, and financial status; this sometimes means clinics are open in the early evening or at special times during weekends. A young person is not turned away if he or she attends without an appointment
- Clients are readily referred, when necessary, to related services such as care and support for young people living with HIV and psychological support for survivors of sexual assault
- Young people, as well as helping to design the programme, are involved in its implementation and evaluation
- The service has gained the support of local leaders and of individuals important in the lives of young people such as partners, parents, and school teachers
- Peer education, where feasible, is being used to enhance the programme.

Counselling

Counselling is an integral component of SRH services. The principles of confidentiality, privacy, and the right to accurate information must be upheld at all times. During counselling, providers should:

- Build rapport with young clients and earn their trust
- Respect the life circumstances of the young people they counsel
- Have excellent interpersonal communication skills, including familiarity with the terminology used by the young
- Have accurate knowledge of the subject matter
- Be sensitive to the prevailing legal, policy, and cultural environment.

Because there are many reasons why a young person might seek help, providers must be ready and willing to discuss a wide range of issues. Whatever the prime reason for the consultation, a counselling session gives the client an opportunity to talk about other worries; however, the provider must beware of the kind of "information overload" that deflects attention from the client's specific concerns. Providers should be able to address questions about body image and development, sexual practices and relationships, and the negotiation of intercourse and condom use. For the client, an understanding of menstrual function and of pregnancy risks is an important foundation for further contraceptive knowledge.

Sexuality counselling

The sexual practices of adolescents may include vaginal, oral, and anal intercourse with a partner of the opposite sex or the same sex. Clearly, advice on contraception and avoidance of STIs has to be adaptable to the sexual behaviour of the person concerned; expert information can empower an individual to adopt safer practices. He or she should be made aware of non-penetrative methods of sex and the option to abstain altogether.

Many young people are uncomfortable when discussing sexuality issues, so counselling can be a lengthy process. In the planning of sessions, this must be borne in mind so that clients have time to express their concerns and make well-informed decisions.

Contraceptive counselling

Three key components are involved:

- Establishing the fertility preferences/ desires of the client
- Establishing the client's STI status and risk
- Advising on contraceptive methods accordingly.

As with all clients, contraceptive decision-making by the young should be based on informed choice: they have the right to choose their method of contraception, after being given adequate and non-biased information on the options available.

Before any recommendation is made, each contraceptive method needs to be assessed on its own merits and in relation to the client's needs and circumstances. Personal, cultural, and other contextual factors, as well as sexual lifestyle and access to health services, should be taken into account. The sexual lives of young people vary greatly, and one important factor is whether they are married or in a stable relationship. Many young people are unprepared for their first sexual encounter when it happens, and even some of those who are sexually active will not be having sex often enough to encourage adherence to a strict contraceptive regimen. Such individual factors should be taken into account when a young person is being helped to choose a method of contraception. Discontinuation rates for young people are high, prominent reasons being lack of knowledge of reproductive functioning, unexpected side-effects, cost, and inability to use the methods correctly or consistently; others are marriage or entry into a steady relationship, fear or embarrassment when attending a clinic, and the short-term nature of relationships common among young people. Adolescents are more likely to use contraception if they are supported by their partner or family. Parental consent is not, however, a prerequisite; among the factors to be considered in this context are national laws, the evolving capacities of the young person, and the prevailing circumstances.

At the first visit, clients should be instructed on how the chosen method works, what side-effects to expect, and how to get regular access to it. Many myths surround the various methods of contraception and providers should endeavour to dispel these. Verbal information on contraception should be supplemented with some of the written or audio materials developed specifically for this age group, and clients should be encouraged to return to the clinic if they have any concerns or questions. They should not leave without being given clear guidance on what to do if they miss one or more contraceptive pills or find themselves in need of emergency contraception.

Sexually transmitted infections/ HIV/ AIDS

Worldwide, the highest reported rates of STIs are in people aged between 15 and 24 years; up to 60 percent of new infections and half of all people living with HIV globally are in this age group. Because of gender-based inequalities, girls and young women are at special risk of acquiring STIs/HIV, and similar inequalities limit their access to prevention and care services.

STIs/HIV are not evenly distributed among young people who engage in sexual activity: factors that influence the risk of these infections include the frequency and type of sexual intercourse engaged in, the number and characteristics of sexual partners, the extent of condom use, the occurrence of violence, and the local epidemiology of STIs. Providers should therefore be ready to discuss STIs/HIV with this client group, and to give information not only on risk-reducing behaviours and practices but also on the common STI symptoms that should prompt attendance for treatment. The correct and consistent use of condoms should be emphasised.

Clients should be counselled on how to protect their partners as well as themselves against STIs. Ideally, therefore, they should be aware of their own STI status. The information required for such counselling can be obtained with due sensitivity by a combination of open questions, assurances that the client's experiences are "normal", and conversation about his or her sexual history. When an STI is diagnosed and treatment has been offered (either on site or by referral to a suitable alternative agency), the client should be advised to refer his or her sexual partners for assessment.

Voluntary counselling and testing for HIV

All young people who visit SRH services for care and/or support should be encouraged to have counselling and testing for HIV, though the likelihood of a positive test will depend on the local HIV prevalence rate as well as on the history of risky sexual behaviour. For a young person, HIV counselling and testing provides an important stimulus to think about various aspects of sexual behaviour, including the prevention of other STIs and unintended pregnancy.

As with other clients, HIV counselling and testing for young people must be conducted according to strict quality standards - confidential, non-judgmental, and tailored to the client's individual needs. The goals of pre-test and post-test counselling are to ensure that the client understands what the test means, how to prevent transmission, how to change risky behaviours, and what services and support are available in the event of a positive result. Counselling and testing should not be conducted in isolation but linked to comprehensive youth-friendly SRH services, including referral, where necessary, to other sources of treatment, care, and support. Providers must adhere to local and national protocols, laws, and regulations governing the provision of HIV services.

A young person living with HIV may require specific counselling and support, to help in avoidance of unintended pregnancy, STIs, and HIV re-infection. A peer counsellor can be useful here. Important goals are to promote safer sexual behaviour and to strengthen self-esteem and self-confidence. Established referral systems to HIV services should be available.

Choice of contraceptive method

Young people have the same range of contraceptive options as adults and have the right to make their own choice. As with older clients, informed contraceptive decision-making goes beyond issues of medical safety. During discussion of the options, a key issue is whether the young person seeks protection against STI/HIV as well as pregnancy, and he or she may need encouragement to speak freely on this matter.

For sexually active young people, male and female condoms are the only methods that protect against both pregnancy and STIs/HIV. Young people should be encouraged to use condoms correctly and consistently with every act of intercourse whenever there is a possible risk of STI/HIV, even if the female partner is already using another form of contraception. None of the other methods - hormonal contraceptives (including emergency contraception), intrauterine devices, withdrawal, fertility awareness based methods including periodic abstinence, or sterilisation – protects against STIs/HIV.

More detailed information on contraceptive methods and protection against STIs/HIV is contained in other IMAP Statements.* The present Statement deals specifically with the advantages and disadvantages of the various methods for adolescents/ young people.

In medical terms, young age does not limit a client's eligibility for any method of contraception: this is the position taken by the World Health Organization in its Medical Eligibility Criteria for Contraceptive Use. However, the use of certain methods requires special consideration when the client is young, as described below.

Abstinence

Abstinence should be an option for all young people; in many instances, however, it is unsustainable because of sexual coercion or made very difficult by sexual desire or the demands of a relationship. For some young people, abstinence signifies avoidance of all sexual activity; but other abstainers are willing to engage in oral or anal sex, which can transmit STIs and HIV infection. The only couple-related practices that carry no risk of either pregnancy or STIs/HIV are mutual masturbation and other kinds of "outercourse".

Evidence suggests that pledges of abstinence slightly delay the onset of vaginal intercourse but lead to increased rates of oral and anal sex. Such pledges also decrease the likelihood that the individual will use condoms later on and seek care if risks or signs of an STI develop.

Barrier methods

Condoms

Education and counselling on the consistent and correct use of condoms is essential. Counselling sessions should include a demonstration of how to put on and take off the condom and a discussion of how to integrate condom use in sexual activity.

Because of gender and power imbalances, young women may be unable to negotiate safer sexual practices or condom use; and in young men, non-use of condoms may be due to lack of confidence or embarrassment. Both sexes can therefore benefit from training (including detailed information) in how to negotiate safer sexual practices and condom use.

Easy access to emergency contraception is essential for people who rely exclusively on condom use for dual protection, especially when safe and legal abortion services are unavailable or unacceptable to the client. Young people choosing to use condoms as their method of contraception should be provided with a back-up of emergency contraception in case a condom slips or breaks during sexual intercourse.

Male condom

The male latex condom is the single most efficient method for reducing sexual transmission of HIV and other STIs. When used correctly and consistently with every act of intercourse, condoms are highly effective against both unwanted pregnancy and STIs/HIV. Moreover, when used in conjunction with any other method, they enhance contraceptive efficacy and prevent infection – a crucial benefit in young people.

With anal intercourse, pregnancy is not a risk but male condoms should be used to reduce the risk of STIs/HIV.

Major advantages of condoms are that they can be obtained without medical prescription and are well suited to community-based distribution services. Latex condoms should be made readily available, either free or at low cost, and promoted in ways that help overcome social and personal obstacles to their use. For individuals who are allergic or sensitive to latex, male condoms made of synthetic materials such as polyurethane offer an alternative.

A disadvantage is that condoms are less effective against unwanted pregnancy than hormonal methods or intrauterine devices, because correct and consistent use is required immediately before coitus. Cost may also be a deterrent to consistent use.

Providers should be aware that married women face special challenges when they try to negotiate the use of condoms with their husband, if their main purpose is avoid transmission of STI/HIV. Questions of "trust" within the relationship are less likely to arise if condom use is sought for contraceptive purposes.

Female condom

Female condoms offer an alternative which can be initiated by a woman, especially when she has difficulty negotiating male condom use. They may be less effective against unwanted pregnancy than male condoms but, with correct use, their ability to protect against STIs/HIV seems about the same. They are more costly than male condoms – an important consideration for many young people.

An advantage of the female condom is the option of inserting it into the vagina a considerable time before intercourse. Young women should be shown how to insert it and encouraged to practise insertion before starting to use it during intercourse. They need to know that on occasion the penis may slip into the vagina outside the condom or push the condom into the vagina, making it ineffective. If this happens, the woman should stop intercourse and reinsert the condom before continuing.

Diaphragm with spermicide

The diaphragm with spermicide is a suitable method for some young people, but the effective use of this method requires a high level of motivation and skill. Further, the initial fitting of the diaphragm must be done by a provider, and the necessary pelvic examination may be a deterrent to its use. Storage and washing of the diaphragm may be troublesome for a young person who wishes to maintain secrecy. Another obstacle to access is its cost.

Diaphragms have been associated with adverse changes in the vaginal flora and urinary tract infections but may provide some protection against cervical infection and cancer.

Spermicides

Spermicides are much less effective against pregnancy than other contraceptive methods and should not be recommended for use on their own, unless no other method is available. Spermicides have not been shown to improve the contraceptive effectiveness of condoms. No spermicide has been shown to protect against STIs/HIV.

Hormonal methods

Oral contraceptives

Oral contraceptives (which include progestogen-only pills as well as the combined pills) are suitable for young people, highly effective when used properly, and safe.

Routine pelvic and breast examinations, which many young women dislike, are not required before the start of oral contraception. A woman can start using the pill at any time of the month if she is reasonably sure she is not pregnant. It is not necessary to wait for the menstrual cycle to become regular before starting oral contraception.

Some young people have difficulty in taking pills regularly. Since the effectiveness of oral contraceptives depends on consistent and proper use of the method, counselling should emphasise the need for adherence. A 28-day pack will often be the best regimen to offer, because it avoids the 7-day pill-free interval. The client should be given clear instructions on what to do if pills are missed. For young women who wish to avoid menses it is acceptable to take active hormonal pills continuously. All should be informed that fertility returns quickly when pills are discontinued.

The client should also be informed that side-effects such as breakthrough bleeding are common in the first few cycles of oral contraceptive use and that these usually settle over time. She should be encouraged to persevere and to reattend if the side-effects remain troublesome.

Progestogen-only pills (POPs) demand more in terms of compliance than combined oral contraceptives (COCs) since they should be taken at the same time each day. Their use is often associated with irregular bleeding. However, the POP is a useful method in those rare cases where oral contraception is desired but oestrogen is contraindicated.

Certain non-contraceptive benefits, such as regularity of the menstrual cycle, relief from heavy menses, and painful menstruation, may make the COC particularly attractive to a young person.

Oral contraceptives do not protect against STIs/HIV, so the correct and consistent use of condoms is recommended.

Long-acting hormonal methods

Long-acting hormonal methods are safe, highly effective, and suitable for young people. A major advantage is that they do not

require daily action. Long-acting hormonals include progestogen-only injectables, combined injectable contraceptives, and subdermal implants.

When a young woman is counselled on long-term hormonal contraceptives, she should be made aware of the possibility of changes in the menstrual pattern, including irregular, frequent, or prolonged bleeding or amenorrhoea. She should also be advised about the possibility of other side-effects. Advice on counselling and services related to the various types of long-acting hormonal methods can be found in other IMAP statements.

Long-acting hormonal methods do not protect against STIs/HIV, therefore the correct and consistent use of condoms is recommended.

Progestogen-only injectables

Two long-acting progestogen-only injectables are available – depot medroxyprogesterone acetate (DMPA), given every 3 months; and norethisterone enantate (NET-EN), given every 2 months.

There has been some concern about the effect of DMPA on bone. On present evidence, users show a loss of bone mineral density equivalent to that observed during pregnancy and breast-feeding. Some of this loss is regained after discontinuation of DMPA, but there is so far no information on whether bone recovery is eventually complete, whether DMPA use among adolescents leads to reduced peak bone mass, or whether bone loss due to DMPA leads to increased risk of fractures.

DMPA is a contraceptive option for young people with whom other methods have been discussed. IMAP agrees with the statement in WHO's Medical Eligibility Criteria that the benefits of using DMPA in this group outweigh potential risks. Both the progesterone-only injectables are associated with bleeding, somewhat less with NET-EN than with DMPA during the first six months (in particular, NET-EN users are less likely to experience prolonged bleeding or spotting during the first six months). After six months, bleeding patterns are similar. Amenorrhoea is less common with NET-EN: after one year, about one-third of NET-EN users are amenorrhoeic compared with about half of DMPA users.

A young person who is considering the use of a progesterone-only injectable should be informed that her normal bleeding pattern will probably be disrupted, that the likelihood of amenorrhoea will increase with duration of use, and that fertility will not return immediately after cessation.

Combined injectable contraceptives

Combined injectable contraceptives contain oestrogen and progestogen and are administered monthly. They are suitable for young people, highly effective, and well tolerated. Although they may affect the menstrual bleeding pattern, they do so less often than progestogen-only injectables. They are less likely to have an adverse effect on bone mass.

Subdermal implants

Subdermal implants, which offer the lowest dose of sustained progestogen and do not affect bone density, are suitable for young people who seek long-term contraceptive protection. A potential drawback is that a surgical procedure is required for insertion and removal. For this age group it is particularly important to offer facilities where subdermal implants can be removed promptly on request. For most women, bleeding is either infrequent or absent but a proportion will get recurrent and prolonged bleeding.

New hormonal delivery systems: Transdermal patch and vaginal ring

The transdermal patch is a 4 cm square patch which releases oestrogen and progestogen over seven consecutive days. During the menstrual cycle three patches are worn consecutively followed by a 7-day patch-free interval.

A vaginal ring is a thin, transparent, flexible device that releases oestrogen and progestogen. It is kept in the vagina for three weeks, followed by a ring-free week. The mode of action of both patch and ring is similar to that of the COC. Either may be a suitable contraceptive option for young people. An advantage of the ring is that it requires action only once a month rather than daily or weekly. Neither the patch nor the ring protects against STIs/HIV, so the correct and consistent use of condoms should be recommended.

Intrauterine devices (IUDs)

The copper-bearing IUD is a safe and highly effective method of reversible contraception, providing contraceptive protection for up to 12 years.

Women who have not given birth may be at higher risk than parous women for pain and discontinuation. Another consideration in young women is the risk of STIs, which may be higher because of multiple sexual partners. Therefore an STI risk assessment should be done when use of this method is contemplated. An IUD should not be inserted if symptoms of STIs are present or if the risk assessment is positive. However, for a young woman at low risk of STIs, the IUD can be considered an option.

The client should be warned that the insertion procedure may be uncomfortable, especially if she is nulliparous. She should also be informed about the common side-effects associated with IUD use, including increased menstrual bleeding and pain (with copper IUDs), all of which may make the method unattractive to a young person. She can, however, be reassured that symptoms subside with use of analgesics. Troublesome side-effects are less common with the levonorgestrel-releasing IUD, but this device can be more difficult to insert because of its greater width.

IUDs do not protect against STIs/HIV, so the correct and consistent use of condoms should be recommended.

Withdrawal

In some circumstances withdrawal – removal of the penis from the vagina before ejaculation – may be the only method available to a young person. To be effective it demands exceptional motivation, self-control, and commitment. A more effective method, especially condoms, should be recommended.

Again, this method does not protect against STIs/HIV – an additional reason for recommending the correct and consistent use of condoms.

Methods based on fertility awareness

Fertility-awareness-based methods depend on awareness of the start and end of the fertile period in the menstrual cycle and abstention from vaginal sex between those times. Irregular menstrual cycles make these methods difficult to follow, and they tend to be unsuitable also for women who have intercourse only occasionally. These methods are generally not recommended for young people.

Fertility-awareness-based methods do not protect against STIs/HIV, so consistent and correct use of condoms should be recommended.

Sterilisation

Sterilisation, as a permanent form of contraception, is very seldom appropriate in young people, whether male or female. In the exceptional cases where it is contemplated, appropriately obtained informed choice and consent is mandatory. Young people who are sterilised have higher rates of regret than older men and women.

Sterilisation does not protect against STIs/HIV, so the correct and consistent use of condoms should be recommended.

Emergency contraception

Young people are often in need of emergency contraception, either because they have had sexual intercourse without using a regular contraceptive method or because their method has failed during use (eg, condom breakage or missed pills). In view of the incidence of sexual assault, incest, and coerced sex among young people, even young people who are not sexually active should be made aware that emergency contraception is an option and how they can obtain it.

Two oral hormonal regimens have been proved safe and effective for emergency contraception and are widely available. The most convenient consists of 1.5 mg levonorgestrel taken as soon as possible after unprotected intercourse. Levonorgestrel pills are effective up to five days after unprotected intercourse, but the sooner they are taken the more effective they are. In the other method, known as the Yuzpe regimen, combined oral contraceptive pills are taken as soon as possible after unprotected intercourse. When the interval from unprotected intercourse exceeds 72 hours, the Yuzpe regimen is less effective than the levonorgestrel-only method. The levonorgestrel-only regimen is less likely to cause nausea and vomiting and should be the first choice available. In some countries, both regimens are formulated and labelled specifically for use as emergency contraception. Alternatively, both regimens can be constructed from regular contraceptive pills (combined pills or mini-pill).

Emergency contraception pills have no known contraindications or serious side-effects; therefore no screening, physical examination, or laboratory tests are required before provision. Although this method is not recommended for a woman with suspected pregnancy, if taken it will not affect the course of the pregnancy or harm the fetus.

Programmes should explore ways to make emergency contraception more easily accessible to this group. IPPF Member Associations can take a lead in ensuring that a dedicated product is obtainable in their countries and campaign for its availability without prescription.

Copper-releasing IUDs offer another method of emergency contraception up to 5 days after unprotected intercourse. This method may be particularly suitable when the client is considering its use for long-term contraception and/or when the elapse of more than 72 hours has made a hormonal regimen less likely to work. In the context of emergency contraception, the Medical Eligibility Criteria are the same as those for regular use of these devices. Antibiotic prophylaxis should be considered if there is a risk of infection.

A young person who repeatedly seeks emergency contraception should be counselled on the use of a regular contraceptive method. A follow-up visit within three to four weeks of use is advisable, to rule out pregnancy and to discuss ongoing contraceptive needs.

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* *Other related IMAP statements:*

- Statement on HIV infection and AIDS. *IPPF Med Bull* 2005; 39(2): 1–4.
- Statement on the management of HIV infection within sexual and reproductive health services. *IPPF Med Bull* 2005; 39(1): 1–6.
- Statement on intrauterine devices. *IPPF Med Bull* 2003; 37(2): 1–4.
- Statement on emergency contraception. *IPPF Med Bull* 2004; 34(3): 1–3.
- Statement on hormonal methods of contraception. *IPPF Med Bull* 2002; 36(5): 1–8.
- Statement on barrier methods. *IPPF Med Bull* 2001; 35(4): 1–3.
- Statement on dual protection against unwanted pregnancy and sexually transmitted infections, including HIV. *IPPF Med Bull* 2000; 34(4): 1.
- Statement on gender-based violence. *IPPF Med Bull* 2000; 34(2): 1–2.

Progestogen-only injectable contraceptives and bone health

Nuriye Ortayli

Progestogen-only injectables are highly effective contraceptives that can be provided in a wide range of settings. They are practical and convenient since no daily or coitus-related action is required and they offer more privacy for users than do many other forms of contraception. Their main disadvantages are disruption in the regularity of menstruation, weight gain, and a delay in return to fertility after cessation.

The most commonly used progestogen-only injectable contraceptive is depot medroxyprogesterone acetate (DMPA, 150 mg), administered every three months. Next is norethisterone enantate (NET-EN, 200 mg), which has to be injected every two months. Progesterone-only injectables are widely used in the developing world[1] and in certain countries now account for 30-50% of the modern method mix (Table 1).[2] Because of their popularity among the young, they have an important role in preventing teenage pregnancy.

In the past decade several studies have revealed slight decreases in bone mineral density (BMD) in DMPA users,[3] and early in 2006 the US and British drug regulatory agencies issued warnings that DMPA might increase the risk of osteoporotic fracture later in life.[4,5] The World Health Organization's Medical Eligibility Criteria for Contraceptive Use (MEC), in its latest published edition (2004), puts progestogen-only contraception for adolescents in category 2 – meaning that, though these injectables may have some negative effects on BMD, their

TABLE 1. Current use of injectables among women aged 15-49 years, selected countries

Country	Current users among all women of reproductive age (%)	Current use among modern method users (%)	Current use among adolescent modern method users (%)
South Africa (1998)	27.3	55.4	80.4
Kenya (2003)	10.5	46.3	41.7
Indonesia (2002/2003)	27.6	49.0	67.3
Bangladesh (2004)	9.8	20.6	18.2
Nepal (2001)	8.4	23.7	39.8
Peru (2000)	9.1	30.1	55.4
Bolivia (2003)	5.3	22.4	32.6

Source: ORC Macro, 2006. MEASUREDHS STAT Compiler. www.measuredhs.com

benefits outweigh the risks. Prompted by the fresh concerns, in July 2005 WHO convened a multidisciplinary meeting of bone health and family planning experts in Geneva to examine the association between hormonal contraceptive use and bone health. The group evaluated the results of published studies as well as preliminary data from ongoing studies. The experts also examined the role of hormonal contraceptives, especially progestogen-only injectables, in the current contraceptive mix, together with pregnancy-associated morbidity and mortality risks in the same areas. Since there are few data on NET-EN and bone health, the conclusions were based mainly on results with DMPA.

The WHO Statement[6] makes clear that other types of progestogen containing contraceptives – progestogen-only pills (minipills), levonorgestrel-releasing implants such as Norplant and Jadelle, levonorgestrel-releasing intrauterine devices, and combined hormonal contraceptive methods such as combined oral contraceptives and combined injectables - can continue to be used by women of all ages without any concern for negative effects on bone health.

According to data examined, initially DMPA decreases BMD quite rapidly. The loss then becomes slower and the process appears to be reversed after discontinuation of use. Since the decrease in BMD associated with DMPA use is low and is reversible, the experts concluded that the theoretical risk that it will lead to an osteoporotic fracture is slight. Therefore, the benefits of this mode of contraception outweigh the risk in women aged 18-45. In this group there need be no concern about negative effects on bone health. However, evidence is yet insufficient to show that women who use DMPA during their premenopausal years will be able to make up for any loss in BMD before reaching menopause, or that very young users (menarche to age 18) will be able to attain their potential peak bone mass. Therefore, it is advised that women in these age groups should be followed during long-term use of DMPA, and that the benefits and risks should be reconsidered with them individually over time.

In summary:

- For women aged 18–45 who are otherwise eligible, no restriction on use
- For adolescents (menarche to 18) and women over 45, advantages generally outweigh theoretical concerns about fracture risk. Since data are lacking on effects of long-term use, overall risks and benefits to be reconsidered over time during long term-use
- Recommendations about DMPA apply also to NET-EN
- No restriction on other progestogen-only methods in women otherwise eligible.

Healthcare providers and programme managers may wish to consult the WHO website (www.who.int/reproductive-health) for the most up to-date guidance, since WHO will continue to monitor research in this area and will review the recommendations as new evidence emerges.

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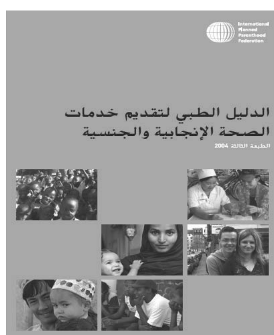
6 WHO Statement on Hormonal Contraception and Bone Health, July 2005. http://www.who.int/reproductive-health/family_planning/docs/hormonal_contraception_bone_health.pdf

Medical and Service Delivery Guidelines, 3rd edition now available in four languages



IPPF's *Medical and Service Delivery Guidelines for Sexual and Reproductive Health Service* deal mainly with family planning but offer evidence-based recommendations on related issues including abortion and sexually transmitted infections. The first chapter of the 3rd and latest edition defines the approach with its title "Clients' rights and providers' needs".

As with previous editions, the text was prepared under the supervision of IPPF's International Medical Advisory Panel. Four of the fifteen chapters are entirely new - on the normal menstrual cycle, reproductive health screening for well women, safe abortion, and HIV infection.

First published in English, the 3rd edition can now be read also in Arabic, French, and Spanish. Versions in all four languages are available on the IPPF website at www.ippf.org or can be ordered in hard copy by contacting medtech@ippf.org. The *Guidelines* are free of charge to individuals and organisations in developing countries; for others the printed editions cost US$25 (UK£14).